

FINAL REPORT OF LABORATORY EXAMINATION

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IDEXX BioResearch Case # 36295-2017

Received: 12/20/2017
Completed: 12/27/2017

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Specimen Description

Species: rat
 Description: Live sentinel rats
 Number of Specimens/Animals: 11
 Building/Facility: Discovery Ridge
 Area: W112, W113, W114

Client ID	Investigator	Room #	Strain /Breed	Sex	Rack	Date Placed
112-A	Bryda	W112	CD	F	1	9/18/2017
112-B	Bryda	W112	CD	F	2	9/18/2017
112-C	Bryda	W112	CD	F	3	9/18/2017
112-D	Bryda	W112	CD	F	4	9/18/2017
112-E	Bryda	W112	CD	F	5	9/18/2017
112-F	Bryda	W112	CD	F	6	9/18/2017
112-G	Bryda	W112	CD	F	7	9/18/2017
113-A	Bryda	W113	CD	F	2	9/18/2017
114-A	Bryda	W114	CD	F	2, 3	9/18/2017
114-B	Bryda	W114	CD	F	4	9/18/2017
114-C	Bryda	W114	CD	F	5	9/18/2017

Services/Tests Performed: Rederivation Necropsy Profile

Serologic evaluation for antibodies to: *Clostridium piliforme*, *Mycoplasma pulmonis*, CAR bacillus, H1, Hantaan, KRV, LCMV, MAV1, PVM, RCV/SDAV, REO3, RMV, RPV, RTV, Sendai

PCR evaluation for: *Helicobacter bilis*, *Helicobacter ganmani*, *Helicobacter hepaticus*, *Helicobacter mastomyrinus*, *Helicobacter rodentium*, *Helicobacter spp.*, *Helicobacter typhlonius*, *Mycoplasma pulmonis*, *Pneumocystis carinii*, *Streptobacillus moniliformis*

Parasitologic evaluation for: fur mites, mesostigmatid mites, lice, Spironucleus muris, Giardia muris, large intestinal flagellates and amoeba, pinworms and tapeworms

Microbiologic evaluation for: *Corynebacterium kutscheri*, *Pasteurella multocida*, *Pasteurella pneumotropica*

biotype Heyl, *Pasteurella pneumotropica* biotype Jawetz, *Salmonella enterica*, *Streptococcus pneumoniae*

General Comments: Discovery Ridge - Q4 'A' room sentinel rat necropsies

Summary: All test results were negative.

NECROPSY

No gross lesions were detected in any of the body systems and organs examined.

SEROLOGY SUMMARY

	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
CAR bacillus	-	-	-	-	-	-	-	-	-
Hantaan	-	-	-	-	-	-	-	-	-
LCMV	-	-	-	-	-	-	-	-	-
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-
MAV1	-	-	-	-	-	-	-	-	-
RPV	-	-	-	-	-	-	-	-	-
RMV	-	-	-	-	-	-	-	-	-
KRV	-	-	-	-	-	-	-	-	-
H1	-	-	-	-	-	-	-	-	-
PVM	-	-	-	-	-	-	-	-	-
RCV/SDAV	-	-	-	-	-	-	-	-	-
REO3	-	-	-	-	-	-	-	-	-
RTV	-	-	-	-	-	-	-	-	-
Sendai	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>	-	-	-	-	-	-	-	-	-
Rat IgG	N	N	N	N	N	N	N	N	N

	114-B	114-C
CAR bacillus	-	-
Hantaan	-	-
LCMV	-	-
<i>Mycoplasma pulmonis</i>	-	-
MAV1	-	-
RPV	-	-
RMV	-	-
KRV	-	-
H1	-	-
PVM	-	-
RCV/SDAV	-	-
REO3	-	-
RTV	-	-
Sendai	-	-
<i>Clostridium piliforme</i>	-	-
Rat IgG	N	N

Legend: + = positive - = negative blank = test not performed EQ = equivocal HE = hemolysis precluded testing I = insufficient W = weak positive WB = Western Blot confirmatory analysis pending NS = non-specific reactivity N = normal IgG L = less than normal IgG

PCR EVALUATION

feces	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
<i>Helicobacter</i> spp.	-	-	-	-	-	-	-	-	-
<i>Helicobacter bilis</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter mastomyrinus</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter rodentium</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-	-	-	-	-	-

feces	114-B	114-C
<i>Helicobacter</i> spp.	-	-
<i>Helicobacter bilis</i>	-	-
<i>Helicobacter ganmani</i>	-	-
<i>Helicobacter hepaticus</i>	-	-
<i>Helicobacter mastomyrinus</i>	-	-
<i>Helicobacter rodentium</i>	-	-
<i>Helicobacter typhlonius</i>	-	-

lung	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
<i>Pneumocystis carinii</i>	-	-	-	-	-	-	-	-	-

lung	114-B	114-C
<i>Pneumocystis carinii</i>	-	-

oral swab	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-
<i>Streptobacillus moniliformis</i>	-	-	-	-	-	-	-	-	-

oral swab	114-B	114-C
<i>Mycoplasma pulmonis</i>	-	-
<i>Streptobacillus moniliformis</i>	-	-

Legend: + = positive - = negative id:id = pooled sample range id+id+id = non-range pooled sample NT or blank = no test performed wps = weak positive

PARASITOLOGY

	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
parasites	-	-	-	-	-	-	-	-	-

	114-B	114-C
parasites	-	-

MICROBIOLOGY

Specimen/Source: cecum

Isolate	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
<i>Salmonella enterica</i>	-	-	-	-	-	-	-	-	-

Specimen/Source: cecum

Isolate	114-B	114-C
<i>Salmonella enterica</i>	-	-

Specimen/Source: nasopharynx

Isolate	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
<i>Corynebacterium kutscheri</i>	-	-	-	-	-	-	-	-	-
<i>Pasteurella multocida</i>	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i> biotype Heyl	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i> biotype Jawetz	-	-	-	-	-	-	-	-	-
<i>Streptococcus pneumoniae</i>	-	-	-	-	-	-	-	-	-

Specimen/Source: nasopharynx

Isolate	114-B	114-C
<i>Corynebacterium kutscheri</i>	-	-
<i>Pasteurella multocida</i>	-	-
<i>Pasteurella pneumotropica</i> biotype Heyl	-	-
<i>Pasteurella pneumotropica</i> biotype Jawetz	-	-
<i>Streptococcus pneumoniae</i>	-	-

Legend: + = agent recovered - = agent not recovered blank = test not performed n = no growth X = Preliminary

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SEROLOGY DETAILS

	Baseline	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
CAR bacillus										
CAR bacillus purified bacteria	MFI > 3.750	-	-	-	-	-	-	-	-	-
Hantaan										
Hantaan NP	MFI > 4.000	-	-	-	-	-	-	-	-	-
LCMV										
LCMV recombinant	MFI > 3.000	-	-	-	-	-	-	-	-	-
Mycoplasma pulmonis										
<i>M. pulmonis</i> purified bacteria	MFI > 4.250	-	-	-	-	-	-	-	-	-
MAV1										
MAV1 purified virus	MFI > 3.750	-	-	-	-	-	-	-	-	-
RPV										
RPV purified virus	MFI > 2.500	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-
RMV										
RMV VP2 recombinant	MFI > 2.000	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-
KRV										
KRV purified virus	MFI > 3.000	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-
H1										
H1 purified virus	MFI > 1.750	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-
PVM										
PVM purified virus	MFI > 2.500	-	-	-	-	-	-	-	-	-
RCV/SDAV										
RCV/SDAV purified virus	MFI > 3.750	-	-	-	-	-	-	-	-	-
RCV/SDAV Spike	MFI > 3.750	-	-	-	-	-	-	-	-	-
REO3										

If you have questions, please call our toll free number at 1-800-669-0825 or e-mail us at idxxbioresearch@idexx.com.

	Baseline	112-A	112-B	112-C	112-D	112-E	112-F	112-G	113-A	114-A
REO3 purified virus	MFI > 4.900	-	-	-	-	-	-	-	-	-
RTV										
RTV purified virus	MFI > 2.000	-	-	-	-	-	-	-	-	-
TMEV purified virus	MFI > 2.000	-	-	-	-	-	-	-	-	-
Sendai										
Sendai purified virus	MFI > 3.750	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>										
<i>Clostridium piliforme</i> purified bacteria	MFI > 4.950	-	-	-	-	-	-	-	-	-

	Baseline	114-B	114-C
CAR bacillus			
CAR bacillus purified bacteria	MFI > 3.750	-	-
Hantaan			
Hantaan NP	MFI > 4.000	-	-
LCMV			
LCMV recombinant	MFI > 3.000	-	-
<i>Mycoplasma pulmonis</i>			
<i>M. pulmonis</i> purified bacteria	MFI > 4.250	-	-
MAV1			
MAV1 purified virus	MFI > 3.750	-	-
RPV			
RPV purified virus	MFI > 2.500	-	-
NS1 ¹	MFI > 3.750	-	-
RMV			
RMV VP2 recombinant	MFI > 2.000	-	-
NS1 ¹	MFI > 3.750	-	-
KRV			
KRV purified virus	MFI > 3.000	-	-
NS1 ¹	MFI > 3.750	-	-
H1			
H1 purified virus	MFI > 1.750	-	-
NS1 ¹	MFI > 3.750	-	-
PVM			
PVM purified virus	MFI > 2.500	-	-
RCV/SDAV			
RCV/SDAV purified virus	MFI > 3.750	-	-
RCV/SDAV Spike	MFI > 3.750	-	-
REO3			

	Baseline	114-B	114-C
REO3 purified virus	MFI > 4.900	-	-
RTV			
RTV purified virus	MFI > 2.000	-	-
TMEV purified virus	MFI > 2.000	-	-
Sendai			
Sendai purified virus	MFI > 3.750	-	-
<i>Clostridium piliforme</i>			
<i>Clostridium piliforme</i> purified bacteria	MFI > 4.950	-	-

NS1¹: NS1 protein is highly conserved among rodent parvoviruses and thus serves as a generic assay for parvovirus seroconversion.

Legend: + = positive - = negative blank = test not performed EQ = equivocal HE = hemolysis precluded testing I = insufficient W = weak positive WB = Western Blot confirmatory analysis pending NS = non-specific reactivity N = normal IgG L = less than normal IgG
Positive MFI results are reported as "+" followed by a number from 1 to 33 in thousands rounded off to the nearest thousand.

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IDEXX BioResearch Case # 36724-2017

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Specimen Description

Species: rat
 Description: 2 fur mite swabs
 Number of Specimens/Animals: 2
 Building/Facility: Discovery Rdge
 Area: W112

ID	Client ID	Investigator	Room #
1	Fur mite swab racks 1-4A	Bryda	W112
2	Fur mite swab racks 4B-7	Bryda	W112

Services/Tests Performed: Fur Mite

PCR evaluation for: *Myocoptes*, *Radfordia*/*Myobia*

General Comments: AO Quarterly fur mite testing.

Summary: All test results were negative.

PCR EVALUATION

pelt swab	1	2
<i>Mycoptes</i>	-	-
<i>Radfordia/Myobia</i>	-	-

Legend: + = positive - = negative id:id = pooled sample range id+id+id = non-range pooled sample NT or blank = no test performed wps = weak positive

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IDEXX BioResearch Case # 36725-2017

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Specimen Description

Species: rat
Description: 1 fur mite swab
Number of Specimens/Animals: 1
Building/Facility: Discovery Ridge
Area: W113

Client ID	Investigator	Room #
Fur mite swab rack 2	Bryda	W113

Services/Tests Performed: Fur Mite

PCR evaluation for: *Myocoptes*, *Radfordia/Myobia*

General Comments: AOQuarterly fur mite testing.

Summary: All test results were negative.

PCR EVALUATION

pelt swab	Fur mite swab rack 2
<i>Myocoptes</i>	-
<i>Radfordia/Myobia</i>	-

Legend: + = positive - = negative id:id = pooled sample range id+id+id = non-range pooled sample NT or blank = no test performed wps = weak positive

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IDEXX BioResearch Case # 36727-2017

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Specimen Description

Species: mouse
Number of Specimens/Animals: 1
Building/Facility: Discovery Ridge
Area: W114

Client ID	Investigator	Room #
Fur mite swab	Bryda	W114

Services/Tests Performed: Fur Mite

PCR evaluation for: *Myocoptes*, *Radfordia/Myobia*

General Comments: AOQuarterly fur mite testing.

Summary: All test results were negative.

PCR EVALUATION

pelt swab	Fur mite swab
<i>Myocoptes</i>	-
<i>Radfordia/Myobia</i>	-

Legend: + = positive - = negative id:id = pooled sample range id+id+id = non-range pooled sample NT or blank = no test performed wps = weak positive